Product ID:LITHIUM/MANGANESE DIOXIDE BATTERY, DL 1/3 N MSDS Date:10/26/1992 FSC:6135 NIIN:01-398-5922 MSDS Number: BXCDR === Responsible Party === Company Name: DURACELL USA Address:305 NEW HIGHWAY 64 EAST City:LEXINGTON State:NC ZIP:27292 Country:US Info Phone Num:203-796-4575/4682 Eme rgency Phone Num:203-796-4575/4682 CAGE:DO224 === Contractor Identification === Company Name: BATTERY OUTLET INC Address:1608 CAMPOSTELLA RD Box:City:CHESAPEAKE State:VA ZIP:23324 Country:US Phone:757-545-4442 CAGE:0FGN2 Company Name: DURACELL INC TECHNICAL SALES AND MARKETING GROUP Address: BERKSHIRE CORPORATE PARK Box:City:BETHEL State:CT ZIP:06801 Country:US Phone:203-796-4000 CAGE:90303 Company Name: DURACELL USA Address:305 NEW HIGHWAY 64 E City:LEXINGTON State:NC ZIP:27292 Phone:(617)449-7600

CAGE:DO224 Company Name:DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY) Address:305 NEW HIGHWAY 64 EAST Box:City:LEXINGTON State:NC ZIP:27292-2037 Country:US Phone:617-449-7600 CAGE:2A917

Ingred Name:LITHIUM METAL (0.06 G) CAS:7439-93-2 RTECS #:OJ5540000 Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE DIOXIDE (0.67 G) CAS:1313-13-9 RTECS #:OP0350000 Other REC Limits:NONE RECOMMENDED OSHA PEL:5 MG MN/M3 CEILING ACGIH TLV:5 MG MN/M3

Ingred Name:CARBON BLACK (0.04 G) CAS:1333-86-4 RTECS #:FF5800000 Other REC Limits:NONE RECOMMENDED OSHA PEL:3.5 MG/M3 ACGIH TLV:3.5 MG/M3; 9495

Ingred Name:TEFLON (0.04 G) Other REC Limits:NONE RECOMMENDED

Ingred Name:PROPYLENE CARBONATE (0.08 G) CAS:108-32-7 RTECS #:FF9650000 Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYLENE CARBONATE (0.04 G) Other REC Limits:NONE RECOMMENDED

Ingred Name:DIMETHOXY ETHER (0.20 G) Other REC Limits:3 PPM INDUSTRY STD

Ingred Name:LITHIU

M TRIFLUOROMETHANE SULFONATE (0.05 G) CAS:33454-82-9 Other REC Limits:0.1 MG/M3 3M

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS NOT RELEVANT. Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: RISK OF EXPOSURE OCCURS ONLY IF CELL IS MECHANICALLY, PHYSICALLY/ELECTRICALLY ABUSED. TARGET ORGANS: EYES, SKIN, RESPIRATORY TRACT. ACUTE- MAY CAUS E EYES AND SKIN IRRITATION. LITHIUM CAN CAUSE THERMAL AND CHEMICAL BURNS UPON CONTACT WITH THESKIN. MAY BE HARMFUL IF INGESTED OR INHALED. CHRONIC- NOT KNOWN. **Explanation of Carcinogenicity:NONE** Effects of Overexposure: RISK OF EXPOSURE OCCURS ONLY IF CELL IS MECHANICALLY, PHYSICALLY OR ELECTRICALLY ABUSED. IF CELL IS LEAKING: EYES, SKIN AND RESPIRATORY TRACT IRRITATION, THERMAL AND CHEMICAL BURNS Medical Cond Aggravated by Exposure:NONE

First Aid:EMPLOYEE BREATHING VAPORS FROM VENTING CELL SHOULD BE REMOVED TO FRESH AIR. ANY SKIN, EYE OR MUCOUS MEMBRANE CONTACT WITH ELECTROLYTE SHOULD BE FOLLOWED BY FLUSHING WITH LARGE AMOUNT OF WATER. IN CASE OF EYE CONTACT, CONSULT PHYSICIAN. INGESTION IS UNLIKELY. HOWEVER, CALL PHYSICIAN, IF OCCURED.

Flash Point:NOT RELEVANT Extinguishing Media:WATER Fire Fighting Proce dures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN THE POSITIVE PRESSURE MODE. RAPIDLY COOL BATTERIES WITH WATER. Unusual Fire/Explosion Hazard:TOXIC FUMES MAY BE FORMED.

Spill Release Procedures: IF CELL VENTS OR IS PUNCTURED, VENTILATE AREA WELL. WEAR EYE AND SKIN PROTECTION. RESPIRATORY PROTECTION MAY BE NECESSARY IN CONFINED SPACES. ABSORB LIQUID WITH SUITABLE MA

## TERIAL

SUCH AS SAND OR CLAY. TRANSFER TO CONTAINER FOR LATER DISPOSAL. Neutralizing Agent:NOT RELEVANT

Handling and Storage Precautions:STORE IN COOL, DRY PLACE. AVOID MECHANICAL, PHYSICAL OR ELECTRICAL ABUSE. DO NOT SHORT OR INSTALL WITH INCORRECT POLARITY.

Other Precautions:DO NOT INCINERATE. DO NOT TOUCH BROKEN OR LEAKING BATTERIES. DO NOT ATTEMPT TO RECHARGE. DO NOT CARRY BATTERIES LOOSE IN POCKET OR B

AG. KEEP BATTERIES AWAY FROM SMALL CHILDREN.

BATTERIES MAY EXPLODE/V ENT IF DISASSEMBLED, CRUSHED/IN FIRE.

Respiratory Protection:USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WHEN CELLS ARE INVOLVED IN A FIRE OR LEAKING IN CONFINED SPACES. FOR SPILL, USE FULL-FACE RESPIRATOR WITH PARTICULATE/ORGANIC CARTRIDGE. Ventilation:ADEQUATE Protective Gloves:BUTYL IF HANDLING LEAKERS Eye Protection:SAFETY GLASSE S WHEN HANDLING LEAKERS Other Protective Equipment:EYE WASH STATION, QUICK DRENCH SHOWER Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. Supplemental Safety and Health

## HCC:Z6

NRC/State Lic Num:NOT RELEVANT Spec Gravity:NOT RELEVANT Viscosity:NOT RELEVANT Evaporation Rate & amp; Reference:NOT RELEVANT Solubility in Water:NOT RELEVANT Appearance and Odor:BATTERY

\_\_\_\_\_

Stability Indicator/Materials to Avoid:YES Stability Condition to Avoid:HEAT, RECHARGING, SHORT CIRCUITS, DISASSEMBLING Hazardous Decomposition Products:TOXIC FUMES MAY BE FORMED.

Waste Disposal Methods:DISCHARGED CELLS MAY CONTAIN SIGNIFICANT AMOUNT OF ENERGY AND SHOULD BE HANDLED WITH CARE. THEY SHOULD BE ELECTRICALLY ISOLATED AND PACKED FOR DISPOSAL. DO NOT COMP ACT.

DISPOSE OF IN ACCORDANCE WITH L OCAL, STATE AND FEDERAL LAWS.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibil

ity for the suitability of this information to their particular situation.